

Claims

What is claimed is:

- 1) An intermediate member for a manifold for a misting apparatus, comprising:
a member formed from a single billet having at least one face suitable for
5 receiving an emitter, an axial channel suitable for being welded to tubing, and
a branch channel formed between the face and the axial channel allowing
liquid communication between axial channel and the face.
- 2) The intermediate member of claim 1 further including at least one or more
10 shoulders suitable for being welded to tubing, wherein the one or more shoulders
further form the axial channel.
- 3) The intermediate member of claim 2 wherein the one or more shoulders are
suitable for being orbitally welded to tubing.
- 15 4) The intermediate member of claim 1 wherein the intermediate member has a
plurality of faces.
- 5) A manifold for misting apparatus, comprising:
20 a plurality of a intermediate members formed from a single billet having at
least one face suitable for receiving an emitter, an axial channel suitable for being
welded to tubing,
a branch channel formed between the face and the axial channel allowing
liquid communication between axial channel and the face, and
25 one or more shoulders suitable for being welded to tubing, wherein the one or
more shoulders further form the axial channel.

6) The manifold for misting of claim 5, having a plurality of intermediate members joined to the tubing wherein at least one of the intermediate members is joined to the tubing at shoulders on both sides of the axial channel to allow liquid communication between the tubing and that axial channel.

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7) The manifold for misting of claim 6, wherein the intermediate members are slid over a continuous length of tubing and welded to the tubing by orbital welding.

8) The manifold for misting of claim 5 wherein the intermediate members are joined by orbitally welding segments of tubing between the intermediate members with butt joint welds.

9) The manifold of claim 5 wherein the shoulder is sized to be of substantially the same mass as that of the immediately adjoined tubing so that the tubing and the shoulder have substantially the same heat capacity when welded.

10) The manifold for misting of claim 5 one or more intermediate members has a plurality of faces of substantially flattened surfaces arranged parallel to the tubing.

11) The manifold for misting of claim 5 further including an emitter affixed in each branch channel.

12) The manifold for misting of claim 11 wherein at least one emitter includes a flexible extender.

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- 13) A method for manufacturing a misting manifold, comprising the steps of:
- a) forming one or more intermediate members, each from a single billet having at least one face suitable for receiving an emitter, an axial channel suitable for being welded to tubing,
 - 5 a branch channel formed between the face and the axial channel allowing liquid communication between axial channel and the face, and one or more shoulders suitable for being welded to tubing, wherein the one or more shoulders further form the axial channel.
 - b) joining the intermediate member to tubing at the shoulder on at least
 - 10 one side to allow liquid communication between the branch channel of each intermediate member to the axial channel of the tubing.
- 14) The method for manufacturing misting manifold of claim 13, further including the step of joining a plurality of intermediate members to the tubing so that
- 15 at least one of the intermediate members is joined to the tubing at shoulders on both sides of the axial channel to allow liquid communication between the tubing and that axial channel.
- 15) The method for manufacturing misting manifold of claim 13 wherein the
- 20 intermediate members are joined to the tubing by the further step of sliding the plurality of intermediate members over a continuous length of tubing and welding the intermediate member to the tubing by orbital welding.
- 16) The method for manufacturing misting manifold of claim 13 wherein the
- 25 intermediate members are joined to the tubing by the further step of orbitally welding segments of tubing between the intermediate members with butt joint welds.

17) The method for manufacturing misting manifold of claim 13 wherein one more shoulders are sized to be of substantially the same mass as that of the immediately adjoined tubing so that the tubing and the shoulder have substantially the same heat capacity when welded.

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18) The method for manufacturing misting manifold of claim 13 wherein the face is a substantially flattened surface formed on the intermediate member.

19) The method for manufacturing misting manifold of claim 18 wherein the
10 substantially flattened face is parallel to the tubing.

20) The method for manufacturing misting manifold of claim 19 wherein an intermediate member has a plurality of substantially flattened faces that are parallel to the tubing.

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